

ShaliPVC



Non-reinforced WP Membrane with Signal Layer for Tunnels & Basements

STP Limited

Description

ShaliPVC is a non-reinforced geomembrane of 2 mm thick, opaque, made of flexible polyvinyl chloride, with thin yellow signal layer (twin colour), designed for tunnels and basement works. This geomembrane is not suitable for permanent exposure to UV-radiation.

Product Information

Chemical Base	Polyvinyl chloride (PVC-P)
Handling & Storage	The product must be stored in original unopened and undamaged sealed packaging in dry conditions and temperatures between +5°C and +35°C. Protect the product from direct weather exposure. Store in a horizontal position. Do not stack pallets of the rolls on top of each other, or under pallets of any other materials during transport or storage.
Packaging	Available in 2 m x 20 m roll in 2 mm thickness. (Tolerance: ± 5%)
Shelf Life	2 Year
Handling Precautions	The membrane is non-hazardous, non-flammable and therefore can be disposed of in any regular disposal areas. The membranes can be unloaded by hand or any other convenient means but ensure that there are no sharp or protruding edges within close proximity to avoid puncturing the membrane.

Technical Characteristics at 27°C, 55% RH

Effective Thickness, mm	2.0 ± 5%	Service Temperature	-10°C to + 35°C
Tensile Strength, N / mm ² <ul style="list-style-type: none">• Longitudinal• Transverse	EN 12311 - 2 17 ± 2 17 ± 2	Elongation, % <ul style="list-style-type: none">• Longitudinal• Transverse	EN 12311 - 2 ≥ 300 ≥ 300
Resistance to Static Load, kg	EN 12730 - B No perforation at 20 kg for 24 hours	Root Resistance	EN 14416 No penetration
		Low temperature stability, -20°C	EN 495 - 5 No crack
		Resistance to static puncture, kN	EN 12236 2.35 ± 0.25
Resistant under water pressure for 24 hours	EN 1928 - B Waterproof at 5 Bar	Tear Strength, N	EN 12310 - 2 ≥ 100
		Fire Resistance Rating	EN 13501 Class E

Application

Waterproofing of Tunnel / Basement against water ingress.

Advantages

- Resistant to swelling, rotting and ageing
- Geomembrane with thin yellow signal layer (twin color)
- Excellent Impermeability to water ingress
- Efficient hot air welded seam
- Very high Level of water tightness even with permanent deformation
- Fire Resistant

Application Methodology

- Remove all loose gravels, dirt, oil, grease and other foreign particles by jet or dry air and clean the surface mechanically or by grinding to make it smooth before application.

- Hot air or hot wedge welding achieves correct assembly of the geomembrane. The weld ability and the quality of the welding done on site can be influenced by atmospheric conditions (temperature, humidity of the air) and also by the state of surface of the geomembrane (clean and dry) and must be adapted accordingly.
- An anti-puncturing Geotextile (**ShaliGeoText**) or a composite (protective membrane with laminated fleece) should be placed onto the support of the waterproofing as a base layer with an overlap of 100 mm.
- Lay **ShaliPVC** of desired thickness loosely laid on Horizontal Surface over Geotextile and with the help of Roundels on Vertical surface.
- Provide overlap joints of 80 mm in longitudinal and 100 mm at transverse direction of the **ShaliPVC** and sealed properly with hot air welding only. If it is by hand welding, then the lap joints at longitudinal direction would be min. 100 mm and at transverse direction, 120 mm. After welding, the testing of seams should be done properly and hand welding testing must be done with screw driver.
- We recommend **ShaliGeoText** on laid PVC and then protection screed on top of Geotextile in horizontal surface.
- Terminate **ShaliPVC** at the top of vertical wall with termination strip and fix it by screw at 300 mm c/c.
- All termination strips shall be sealed with water lock sealant and topped up by **ShaliSeal PU GG**.

Precautions

- Always ensure good ventilation when applying the product in a confined space.
- The product is not resistant to permanent contact with bitumen and some types of plastics other than PVC.
- The geomembrane can be used on a bituminous support after the insertion of a suitable separation layer.

Value base of product data

All technical data stated in this Product Data Sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control and different test methods.

Health & Safety

- Use hand gloves and goggles during application.
- Clean hand with soap water after application.



Product Range

- Waterproofing & Insulation ■ Road Surfacing
- Sealants & Adhesives ■ Pipeline Coatings
- Protective/Anti-Corrosion Coatings ■ Epoxy and Flooring
- Grouts and Admixtures (GARA)
- RestoFix - Repair/Rehabilitation ■ Other Construction Chemicals



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